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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,072	03/22/2004	Mingqi Lu	20335-00165	1395
28534 7590 03/26/2008 MIRICK, O'CONNELL, DEMALLIE & LOUGEE, LLP 1700 WEST PARK DRIVE WESTBOROUGH, MA 01581			EXAMINER RAMACHANDRAN, UMAMAHESWARI	
			ART UNIT	PAPER NUMBER
			1617	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/806,072

Applicant(s)

LU ET AL.

ExaminerUMAMAHESWARI
RAMACHANDRAN**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22, 25-27 and 29-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22, 25-27 and 29-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/21/2007.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

The examiner notes the receipt of the amendments and remarks received in the office on 12/21/2007 amending claims 22 and 25. Claims 1-21, 23, 24, 28 have been canceled. Claims 22, 25-27, 29-48 are pending.

Response to Remarks

The rejection of claims 22, 24, 26-45 under 35 U.S.C. 102(e) as being anticipated by Mo et al. (US 2004/0131664, effective filing date Jan 3 2003), rejection of claims 23, 25 under 35 U.S.C. 103(a) as being unpatentable over Mo et al. (US 2004/0131664, effective filing date Jan 3 2003) in view of Sallis (US 2003/0144318) and further in view of Samour et al. (U.S. 5, 942, 545), rejection of claims 22-43, 47, 48 under 35 U.S.C. 103(a) as being unpatentable over Okada et al. (US 2003/0220292) in view of Sallis (US 2003/0144318) and further in view of Samour et al. (U.S. 5, 942, 545) are withdrawn due to the statement provided by the Applicants in the arguments dated 12/21/2007. Applicants state that Mo et al. and the instant application were owned by or subject to an obligation of assignment to the same owner, at the time the invention was made and Okada et al. (US 2003/0220292) and the instant application were owned by or subject to an obligation of assignment to the same owner, at the time the invention was made. Further search and consideration necessitated the following new rejections. Hence the action is made non-final.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22, 25-27, 29-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yeager et al. (WO 01/51053, publication date 19 July 2001) in view of Kifor et al. (U.S. 5,958,884).

Yeager teach a method of treating erectile dysfunction comprising administering topically a semi-solid composition comprising an anesthetic, prostaglandin E1, a penetration enhancer, a polysaccharide gum (a polymeric thickener), a lipophilic compound (aliphatic C2 to C30 ester), and an acidic buffer system providing a buffered pH value of about 3 to 7.4 (See Abstract, p 6, lines 29-37, claims 35-37, 39-46) and water (p 26, lines 1-7). The reference teach addition of topical anesthetics such as lidocaine, fragrances such as myrtenol (up to 5 %), and preservatives in the composition (p 29, lines 5-20). The reference teaches 0.001 to 1 % of prostaglandin E1 and 86 % water/buffer in the composition (p 28, lines 5-9, p 34, Table 3). The reference teaches polyacrylic acid polymer as a suitable polymeric thickener (p 22, lines 15-36, claim 36) in the composition. The reference teaches galactomannan gum as a polysaccharide gum and modified gums in the composition (p 21, lines 1-36). The reference teach that the penetration enhancer is an alkyl-2-(N,N-disubstituted amino)-alkanoate ester, an (N,N-disubstituted amino)-alkanol alkanooate, or a mixture of these and exemplary specific alkyl-2-(N,N-disubstituted amino)-alkanoates include dodecyl 2-(N,N dimethylamino)-propionate (p 19, lines 17-21). The reference teaches that emulsifiers such as sucrose ester (p 24, line 26), glyceryl monooleate, triolein, trimyristin

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and tristearin (up to 5%) can be added in the composition (p 28, lines 22-27). The reference teaches a clinical supply of single dose containing 1.0 mg of prostaglandin E1 with 250 mg of net weight of cream (page 38, line 1). The reference teaches administration of the composition before the intercourse (p 43, lines 5-10).

The reference teaches a method of treating erectile dysfunction and does not explicitly teach a method of treatment of premature ejaculation comprising administering the pharmaceutical composition.

Kifor et al. teach erectile dysfunction is a disorder involving the failure of a male mammal to achieve erection, ejaculation, or both. The reference further teach that symptoms of erectile dysfunction include an ability to achieve or maintain an erection, ejaculatory failure, premature ejaculation, inability to achieve an orgasm (col. 4, lines 65-67, col. 5, lines 1-2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to administer orally a composition comprising anesthetic, prostaglandin E1, a polymeric thickener, a lipophilic component and a buffer system because of the teachings of Yeager et al, and Kifor et al. Yeager teach a composition comprising anesthetic, prostaglandin E1, a polymeric thickener, a lipophilic component and a buffer system for the treatment of erectile dysfunction. Kifor et al. teach erectile dysfunction is a disorder involving the failure of a male mammal to achieve erection, ejaculation, or both and further teach that symptoms of erectile dysfunction include premature ejaculation. One having ordinary skill in the art would have been motivated to administer the composition of Yeager in a method of treatment of premature ejaculation because of

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expectation of success and in achieving therapeutic benefits in treatment of sexual dysfunction. Yeager teach 1.0 mg of prostaglandin E1 in a single dose administration. The references fail to specifically teach the amount of prostaglandin as 0.1-0.5 mg or 0.2 to about 0.3 mg as claimed in claims 22 and 23. The amount of administration in a method of treatment is clearly a result effective parameter that a person of ordinary skill in the art would routinely optimize. Optimization of parameters is a routine practice that would be obvious for a person of ordinary skill in the art to employ. It would have been customary for an artisan of ordinary skill to determine the optimal amount of dosage in order to best achieve the desired results. Thus, absent some demonstration of unexpected results from the claimed parameters, this optimization of dosage amount would have been obvious at the time of applicant's invention. The reference does not specifically teach administering the composition about 2 to 30 or 5-20 minutes before the sexual intercourse. It would have been obvious to one of ordinary skill in the art at the time of the invention to have administered the composition in a method of treatment of premature ejaculation a certain time or period before the sexual intercourse because the time of administration is a parameter that can be routinely optimized. It would have been customary for an artisan of ordinary skill to determine timing of dosage in order to best achieve the desired results. Thus, absent some demonstration of unexpected results from the claimed parameters, this optimization of administering the composition at certain period of time before the intercourse would have been obvious at the time of applicant's invention.

The references do not explicitly teach that method of administration of composition comprising anesthetic and prostaglandin confers the prolongation of ejaculation latency to the patient. It would have been obvious to one of ordinary skill in the art at the time of the invention that composition comprising the same components as claimed when applied to the same set of population will have the same properties and function and hence the ejaculation latency time will be no less than two minutes or will be greater than two minutes and will be prolonged by at least two minutes as claimed in claims 44-46.

Claims 22, 25-27, 29-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yeager et al. (US 2002/0045665, publication date Apr 18 2002) in view of Kifor et al. (U.S. 5,958,884).

Yeager teach a method of treating erectile dysfunction comprising administering topically a semi-solid composition comprising an anesthetic, prostaglandin E1, a penetration enhancer, a polysaccharide gum (a polymeric thickener), a lipophilic compound (aliphatic C2 to C30 ester), and an acidic buffer system providing a buffered pH value of about 3 to 7.4 (See Abstract, claims 17-36) and water (para 0085). The reference teach addition of topical anesthetics such as lidocaine, fragrances such as myrtenol (up to 5 %), and preservatives in the composition (para 0094). The reference teaches 0.001 to 1 % of prostaglandin E1 and 86 % water/buffer in the composition (para 0051, Table 3). The reference teaches polyacrylic acid polymer as a suitable polymeric thickener (para 0074-76). The reference teaches galactomannan gum as a polysaccharide gum and modified gums in the composition (para 0019, 0125). The

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reference teach that the penetration enhancer is an alkyl-2-(N,N-disubstituted amino)-alkanoate ester, an (N,N-disubstituted amino)-alkanol alkanoate, or a mixture of these and exemplary specific alkyl-2-(N,N-disubstituted amino)-alkanoates include dodecyl 2-(N,N dimethylamino)-propionate (para 0052). The reference teaches that emulsifiers such as sucrose ester (para 0081), glyceryl monooleate, triolein, trimyristin and tristearin can be added in the composition (para 0081, 0082). The reference teaches a clinical supply of single dose containing 1.0 mg of prostaglandin E1 with 250 mg of net weight of cream (para 0130). The reference teaches administration of the composition before the intercourse (para 0154).

The reference teaches a method of treating erectile dysfunction and does not explicitly teach a method of treatment of premature ejaculation comprising administering the pharmaceutical composition.

Kifor et al. teach erectile dysfunction is a disorder involving the failure of a male mammal to achieve erection, ejaculation, or both. The reference further teach that symptoms of erectile dysfunction include an ability to achieve or maintain an erection, ejaculatory failure, premature ejaculation, inability to achieve an orgasm (col. 4, lines 65-67, col. 5, lines 1-2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to administer orally a composition comprising anesthetic, prostaglandin E1, a polymeric thickener, a lipophilic component and a buffer system because of the teachings of Yeager et al, and Kifor et al. Yeager teach a composition comprising anesthetic, prostaglandin E1, a polymeric thickener, a lipophilic component and a buffer

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system for the treatment of erectile dysfunction. Kifor et al. teach erectile dysfunction is a disorder involving the failure of a male mammal to achieve erection, ejaculation, or both and further teach that symptoms of erectile dysfunction include premature ejaculation. One having ordinary skill in the art would have been motivated to administer the composition of Yeager in a method of treatment of premature ejaculation because of expectation of success and in achieving therapeutic benefits in treatment of sexual dysfunction. Yeager teach 1.0 mg of prostaglandin E1 in a single dose administration. The references fail to specifically teach the amount of prostaglandin as 0.1-0.5 mg or 0.2 to about 0.3 mg as claimed in claims 22 and 23. The amount of administration in a method of treatment is clearly a result effective parameter that a person of ordinary skill in the art would routinely optimize. Optimization of parameters is a routine practice that would be obvious for a person of ordinary skill in the art to employ. It would have been customary for an artisan of ordinary skill to determine the optimal amount of dosage in order to best achieve the desired results. Thus, absent some demonstration of unexpected results from the claimed parameters, this optimization of dosage amount would have been obvious at the time of applicant's invention. The reference does not specifically teach administering the composition about 2 to 30 or 5-20 minutes before the sexual intercourse. It would have been obvious to one of ordinary skill in the art at the time of the invention to have administered the composition in a method of treatment of premature ejaculation a certain time or period before the sexual intercourse because the time of administration is a parameter that can be routinely optimized. It would have been customary for an artisan of ordinary skill to determine timing of dosage in order to

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best achieve the desired results. Thus, absent some demonstration of unexpected results from the claimed parameters, this optimization of administering the composition at certain period of time before the intercourse would have been obvious at the time of applicant's invention.

The references do not explicitly teach that method of administration of composition comprising anesthetic and prostaglandin confers the prolongation of ejaculation latency to the patient. It would have been obvious to one of ordinary skill in the art at the time of the invention that composition comprising the same components as claimed when applied to the same set of population will have the same properties and function and hence the ejaculation latency time will be no less than two minutes or will be greater than two minutes and will be prolonged by at least two minutes as claimed in claims 44-46.

Response to Arguments

Applicant's arguments with respect to the rejections of the claims have been considered but are moot in view of the new grounds of rejection.

Conclusion

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Umamaheswari Ramachandran whose telephone number is 571-272-9926. The examiner can normally be reached on M-F 8:30 AM - 5:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SREENI PADMANABHAN/

Supervisory Patent Examiner, Art Unit 1617

